



## **PROJECT PROPOSAL**

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Management of Human-Leopard conflict for protection

of Sri Lankan *Panthera pardus kotiya*

# **SECTION 1**

## **Basic Information on the Proposed Project**

## TITLE OF THE GLOBAL PROJECT

Management of the Human-leopard conflict through Environmental Education, Establishment of a warning leopard-watching network, providing physical and economical solutions in Yala National Park Buffer zone

## PROJECTS SITE

Country: Sri Lanka  
Province: Southern Province and Uva Province  
Area: Ranmuthuthenna's districts: (Amarawewa, Punchiwewa, Aluthwewa, And Thamarawewa)

## PROJECTS IMPLEMENTING ORGANISATION

Sri Lanka Wilderness Foundation (SLWF)

## SUMMARY OF THE GLOBAL PROJECT

The Sri Lankan leopard (*Panthera pardus kotiya*) is one of the eight distinct genetic sub-species. It is considered as endangered and listed under the Convention on the International trade of Endangered Species' (CITES) Appendix 1, barring all trade in these animals and their parts. Paradoxically the Sri Lankan IUCN has unlisted the local leopard as 'vulnerable' (one category better off than 'endangered') in their latest Red listing (2007). Even though the country has a high density of leopards (0.18/km), many information campaigns have been modifying the data and overhyping the number of leopards in Sri Lanka creating confusion in leopards' monitoring. Actually there are probably no more than a few hundreds remaining in the wild. It is clear that leopards remain an endangered species in Asia and serious measures need to be taken. Indeed, eight major threats have been identified by SLWF in the country:

1. Human-leopards conflict and due to cattle attacks(encroachment)
2. Habitat destruction
3. Forest fragmentation, leopards' hunting territory reduction
4. Illegal activities (ensnaring, trapping, hunting, rare cases of pelt trade and foreigners as trophy hunters...)
5. Large numbers of domesticated animals released into sensitive areas, which bring illness
6. Mythical beliefs and incorrect knowledge of animals (confusion between lions, tigers and leopards, rare cases of belief that leopards' are human predators-such as in India...)
7. Lack of knowledge/expertise on how to react when locals face injured leopards or leopards' out of park boundaries'.
8. Road kills

Unfortunately, conservation is not a priority for local communities and wild cats are not appreciated for their true value. Among the four species of wild cats found in Sri Lanka, the Leopard is the largest and the top most predator. Sadly, Because of the reduction of forest area due to agriculture and livestock, natural leopards' hunting territory and natural prey are decreasing. As a consequence, leopards' attacks against domesticated livestock are increasing. Hence, farmers continuously fight this predator to protect their cattle and unique economical source of living. Officially, more that 66 leopards have been found dead poisoned, shot or trapped by farmers. But, whilst these are the official figures, in reality, the actual figures must be much higher. Leopards have become a source of danger for the very modest people who usually respect animal welfare in their culture, as it threatens their only economical resource. However it is important to mention that there is no resentment amongst the people since leopards are not threatening human beings such as in India. This is a good and positive feature in favor of leopard conservation in Sri Lanka.

In order to solve this leopard-human conflict it is necessary to take into consideration both sides: human and animal. And to manage leopard conservation, it's necessary to involve the main stakeholders: the farmers. Leopard conservation opposes farmers' willingness, who do not understand the necessity to protect this large predator destroying their unique economical resource. Hence, it will be necessary to first set up a communication and education campaign, to explain the human-leopard problem and work together to try to resolve it.

The Sri Lanka Wilderness Foundation has recognized the value of establishing a leopard warning network in all locations where leopards' are roaming, and a proper leopard education and protection campaign to work with the community in the area to minimize the adverse impact on the decrease of the leopards' population. These community based programs will focus on local farmers' organizations, Schools and the local governing authorities. Special attention would be given to design a tailor-made educational program to attract the younger generation towards leopard conservation, as they are the guardians of the future local natural resources. In the event we manage to protect this umbrella species, we will manage to take care of many other, 'secondary' species. With the proper education and awareness, programs directed towards the young adults will motivate them towards leopard conservation as well as sustainable monitoring of the human-leopard conflict in the area. There will be an additional benefit to the area biodiversity since the project area is located in the buffer zones, in and around the national parks. Successful completion of this project will enhance the peoples' leopard knowledge, change attitudes towards leopards and improve environmental communication skills of local communities for better conservation. Overall, it will improve the area's local economy, develop local community tourism, reduce leopard-human conflict and last but not least improve Human Welfare.



**The major objectives are to:**

1. Raise awareness on the value of leopards, with special emphasis on tourism benefits, environmental importance of conservation among school children, farmers and local decision makers of the area,
2. Create a warning network between all leopards' areas to transfer leopards found outside the boundaries of the National Parks, to alert any presence of leopards around cattle, to improve villager's communication on matters concerning leopards', and to give information to organize leopard-watching tourism in the area.
3. Give local home-grown solutions to Human-leopard conflict through practical and economically viable measures to preserve cattle
4. Be an exemplary organization in leopard-human conflict management, influencing local and national decision makers to obtain long term benefits for and from the rural Yala buffer area

**Expected outputs are:**

1. Increase knowledge on the importance of conservation, and teach the local community the consequences of destroying the top animal among the Sri Lankan carnivore species.
2. Correct any negative mythical beliefs and ill-gained knowledge about leopards and about how to face an endangered leopard but keep respecting traditional beliefs.
3. Increase the proactive participation of community members through the warning network for future leopards' conservation programs.
4. Establish an official long term based warning network for leopards in all areas: locate hot spots of leopards' damage in Yala buffer zone areas, locate injured leopards, locate wild animals for foreign/ local tourist safaris ...
5. Get villagers' as guides and use their services to take visitors to these buffer areas, outside the boundaries of the parks for photographic opportunities, viewing wildlife, overnight stays, thus creating opportunities for continuous sustainable lively hood.
6. Financing and designing pens/kraals for safe keeping of animals at night
7. With the participation of the Sri Lanka wilderness foundation and the involvement of the Department of Wild Life Conservation, Formulate a national compensation scheme for damages by leopards against domestic animals, and any threat to human lives
8. As a whole, organize a leopard conservation community in Sri Lankan leopards' areas, which could be used as a model by the rest of the world.

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## PARTNER ORGANISATIONS

Ecoteam Private Limited  
Proyecto jaguares (Rodrigo Nuñez)

## DURATION OF THE PROJECT

Total (2 year) months: 24  
Start from: December, 2010 to December, 2012

## ESTIMATED BUDGET (in US dollars)

US\$ 22,000.00



## **SECTION 2**

### **Outline of the Proposed Project**

## BACKGROUND TO THE PROJECT

Sri Lanka is a highly diversified area, and it's also one of the rarest places in the world where you can see wild leopards. As an example, in Yala-the biggest national park- the leopard population is remarkable because of its high visibility. But this does not mean that the Sri Lankan leopard population is higher than in other Asiatic countries. Actually, the Sri Lankan leopard sub specie (*Panthera pardus kotiya*) is close to extinction. Unfortunately, National authorities cannot face leopard conservation alone: data reports on deaths of leopards are missing; live leopards' estimation is scanty or overhyped. Thus it is difficult to accept the official status/figures on leopards in Sri Lanka. But the necessity to preserve this big wild cat from numerous human threats is obvious (mainly deforestation and local hunting): out of the population of a few hundred remaining, within the last 10 years, officially, 66 have been found dead. The Decrease of habitat and wild prey has increased the number of leopards' attacks on domestic animals close to villages, outside the boundaries of the national parks, and protected areas. The Local populace has mixed reactions towards this biggest predator because of its habit towards attacking cattle. Within the First 2 weeks of December 2010, 4 calves had been killed by one leopard in Aluthwewa. For the Last 2 years, around 5 leopards have been found poisoned by herders angry at seeing their cattle attacked and killed in the area. These figures will increase if nothing is done to try to solve the human-leopard conflict in Ranmuthuthenna and the neighboring areas. Sadly, Leopards have become the number one enemy for many rural farmers. The Human-leopard conflict in Sri Lanka is above all, a social issue. So to manage a sustainable monitoring project for leopards, what matters most is to get villagers' approval and help.

## OBJECTIVES OF THE PROJECT

1. Raise awareness among school children, farmers and local decision makers of the area, on leopard value with special emphasis on tourism benefits and the environmental importance of conservation
2. Create a warning network between all leopards' areas to transfer leopards found outside the boundaries of the National Parks, to alert any presence of leopards around cattle, to improve villagers' communications on matters concerning leopards' and to give information as to how to organize leopard-watching tourism in the area.
3. Give a local solution to Human-leopard conflict through practical and economically viable measures to preserve cattle
4. Be an exemplary organization in leopard-human conflict management to influence local and national decision makers to obtain long term benefits for the rural Yala buffer area.

## OUTLINE OF THE PROJECT ACTIVITIES

### Key activities

#### **1. Selection of community groups and presentations**

SLWF will conduct a survey and a consultation process to identify the most appropriate schools, farmer associations, schools and local governmental bodies. This selection will encompass the buffer zones of all protected natural sites which belong to leopards' territory. The first mission will be reserved to meet the farmer associations and local stakeholders, to establish direct contact, to check project proposals and to sign agreements to work together.

## **2. Identification of Resource persons/groups**

SLWF has identified and already developed strong relationships with the following resources for the leopard-human conflict awareness campaign

1. University faculty and lecturers
2. Staff of the Department of Wildlife Conservation & Forest Department
3. Extension Service of the Agriculture Department
4. Other government agencies and local authorities
5. Conservationists
6. Leopard specialists Wild Cats specialist Rodrigo Nuñez

Since the above-mentioned organizations already have a strong commitment for environmental education of Sri Lanka, Eco Team will have in place a proper coordinating mechanism to get the maximum support from these organizations for the success of this project.

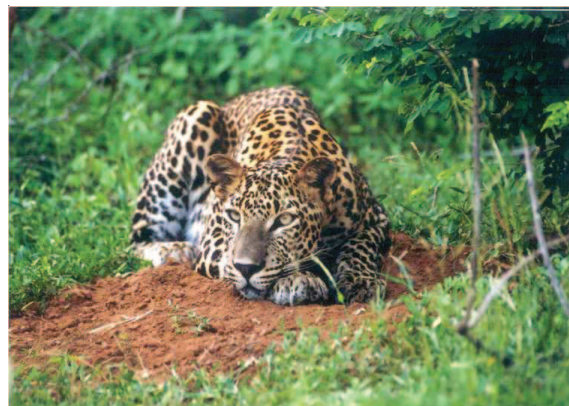
## **3. Five micro scale projects will be run at the same time**

### **Project 1:**

#### **Communication Campaign**

In each leopard hotspot; schools, farmer organizations and governmental bodies will be identified as the target groups of this project. SLWF will conduct a 2-day program at each site. The first day will be reserved for environmental films, videos, and slide presentations. The second day will be devoted entirely to give short lectures by the relevant experts, with ample time for community feedback. Priority will be given to explain the human leopard conflict, and to demystify common negative beliefs on wild cats, overall explain our objective to solve human leopard conflict instead of doing only conservation, and to try to set up new ideas for solving this human-leopard problem.

Different multi-media presentations will be produced showing the beauty, importance, and consequences of extinction of leopards in the local area. Special requests will be made to the most popular nature photographers and videographers to obtain attractive images of leopards. It is easier for Eco Team to obtain such images since we have already helped many leading national and international nature photographers to capture the beauty of wildlife.



## **Project 2:**

### **Scientific Campaign and Establishment of warning network for main leopards 'hotspots:**

In each leopard hotspot schools, farmer organizations and governmental bodies will be identified as the target groups of this project. SLWF will also provide outside volunteers responsible tourists supervised by a scientist/biologist/naturalist to work in the leopard area. They all will be the ones who set up the warning network and the scientific campaign. Main stakeholders will definitely be the farmers, who have been confront by the leopards' damage and make an inquest on their real needs: utility of pens, reasonable and realistic financial compensation organized from local authorities, leopard-watching programs for outdoor tourists on their own private land, to develop local economy, any other pro-active ideas for solutions... Communication skills and the ability to synthesize are absolutely necessary here. Help from a translator from Sinhala to English and English to Sinhala will definitely be necessary. A serious supervision for the outside Volunteers will be necessary and will be provide by ECO Team, partner of the foundation and used to deal with local traditional communities.

In so far as leopards are a threat for young cattle, a communication network must be set up between herders. When leopard tracks are spotted or attacks identified in the area, the idea is to communicate to all herders and Wildlife Department officials responsible, the presence of the animal. Outside volunteer will help. That alarm system will improve efficiency in keeping the calves safe, and monitoring leopard damage after an attack. Registering scientifically the number of attacks will constitute an important document. Furthermore, communicating about leopards found outside of the boundaries of Yala National Park will allow protection time for the felines: giving adequate time to catch/release them into a protected area; if it's an injury, to monitor and cure it... This warning system will also allow communication between locals responsible for volunteer tourism in the area, to get prior approval from the villagers, before bringing the guests into sensitive areas... Since almost all farmers are using personal hand phones, this could be an opportunity to use these tools to settle the official leopard warning system for the area. Modalities will be to check whom to choose among farmers and government authorities responsible for the area.

## **Project 3:**

### **Establishment of pens/kraals**

SLWF is planning to sponsor the construction of leopards' proof pens for keeping cattle safe during the night. Villagers from others leopards' areas have been working on designing strong hermetic pens to put the calves and young goats. Actually, after earlier programs, discussion and research, they tried out an idea which they felt would help the cattle herders and in turn save the leopards. Farmers designed a cage made of chain link which was 10ft x 20ft x 5ft. The cages are mobile and therefore when the cattle are moved from place to place for their grazing the cages can be moved with ease. After the cattle are herded in the evenings, the calves are put into this cage for the night. The cage is covered on all sides, so that the leopard cannot enter from any angle. It proved to be a success and at present 7 such cages are in use in some of Sri Lankan leopards' hotspots. Observers have reported that the leopards have attempted to attack the calves on numerous occasions and have been prevented from doing so because of the cages. Aim of the project will be to find a way to collect funds to provide and to improve these cages for the Yala buffer area in agreement with local farmers. The cages' maintenance and surveillance can be done with

the help of voluntary villagers and one local person responsible as the project's supervisor. One supervisor for each cage will be necessary.

The cost of the raw material per cage is approximately Rs. 30,000/- Cages will be made by villagers and the raw material for the cages will be given and sponsored by SLWF and others donors.

#### **Project 4:**

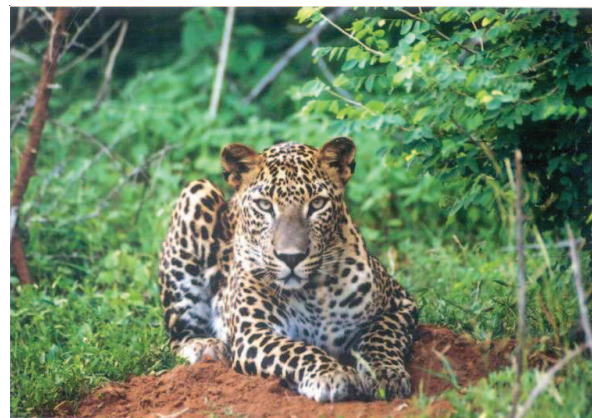
##### **Establishment of leopard watching and wildlife tourism, outside the boundaries of Yala**

The idea is to improve the local economy through local sustainable development by villagers and for the villages. Sustainable tourism around leopard-watching is one of the main projects for the Yala buffer villages. These neglected villages are sadly out of government's considerations which still have to rebuild the country after the end of decades of a civil war. Leopards-human conflict is one of the least priorities for the authorities. So far, with the inducement and the involvement of the villagers we have faced until now, there is a willingness to resolve this conflict and to improve the local economy. Villagers are ready to work on their own through micro projects, and around the main project of leopards watching outside the boundaries of the National Park, responsible tourism will be organized by the local community. Volunteer framers will lend their uncultivated lands to set camp sites or make typical crops guardians' houses available and livable to receive guests. A minimum standard of hotel business to welcome tourists will be necessary. Business hotel workshops will be organized with the interested stakeholders. 2 days sessions with presentations by professionals will be organized following the locale needs. This agro sustainable nature tourism will be responsible business to show the local traditional way of living. For this reason, the target guests will be nature and community lovers, responsible and respectful of tradition, looking for different and responsible holidays, not looking for luxurious facilities. There will be selected advertisements to foreigners through the SLWF website. Local tourism could be advertised working with local hotels and tour operators. The number of tourists will be limited by a previous environment assessment in the area. The flow of external currency will be a great provision for the villages' economy. This will improve local economy and increase awareness on leopard conservation importance in the rural community.

#### **Project 5:**

##### **Establishment of financial compensatory help from government**

The first step will be to constitute a complete carpet on leopard presence and damage in the area, thanks to the warning network and local volunteer work. Then an assessment of the damage will be done and an equivalent in money to the damage will be calculated for each type of damage (calve attack, juvenile attack, goat attack...). A schematically compensatory plan will be written to standardize the process. This will be done with local authority and farmer associations' agreement. The Final aim will be to propose this compensation chart to the higher authorities to eventually make it a *national* official leopard compensation process for the country.



## **Key stakeholders to be involved in the project and their roles**

All the villagers will be involved as explained above. A critical component of the project is to receive feedback (survey, monthly reports, in-situ missions...) from the villagers about their needs and aspirations, so that the land and resources can be managed for the benefit of both the community and the natural resources. The university, government staff and conservationists mentioned above will also be involved in the planning and the implementation of the project.

## **Key benchmarks and indicators for monitoring and evaluation**

Measures of success of the proposed education campaign will be assessed by distributing a simple questionnaire among the targeted community groups. The same questionnaire will be distributed in pre- and post-educational campaigns on general environmental knowledge, leopards' topics, local environmental issues, and community willingness to participate in future conservation related programs. Data will be analyzed to measure the success of the project. Well design certificates of participation will be awarded for each participant after the program. After Tourism & hotel business workshops and environment workshops, official diplomas will be awarded to participants. Inter-school environmental awareness quiz competitions will also be conducted before the end of the project for school children between the age group of 5-9. Teachers will be interviewed to ascertain the degree to which the students have understood and integrated the information into their lives, and whether the information will be used in the classrooms on an on-going basis. It is expected that the contacts established between the SLWF, the farmers and local authorities will be the foundation of ongoing relationships that contribute to national leopard and nature conservation.

SLWF will be able to extend the geographic area to continue future education programs. The Future envisions programs being conducted at a minimal cost by the selected group of community members after this project. SLWF will be able to select five highly motivated students from each school to form a group, to continue programs in other schools.

## **Potential/anticipated risks**

No potential or anticipated risks are associated with key activities.

## **OUTCOMES OF THE PROJECT**

1. Increase the knowledge among the local community, the consequences of destruction and the importance of conservation of the top Sri Lankan carnivore species...
2. Correct uncorrected knowledge, traditional and negative mythical beliefs about leopards being a dangerous species.
3. Increase the proactive participation of community members for future leopards' conservation programs through the warning network.
4. Establish an officially organized long term warning network for leopards' in all areas: locate hot spots of leopards' damage in Yala buffer zone areas, locate injured leopards, and locate wild animals for tourist watching tours...

5. Get villagers' as guides and use their services to take visitors to these buffer areas, outside the boundaries of the parks for photographic opportunities, viewing wildlife, overnight stays, thus creating opportunities for continuous sustainable lively hood.
6. Financing and designing pen/kraals for safe keeping of animals at night
7. With the participation of the Sri Lanka wilderness foundation and the involvement of the Department of Wild Life Conservation, Formulate a national compensation scheme for damages by leopards against domestic animals, and any threat to human lives
8. As a whole, organize a leopard conservation community in Sri Lankan leopards' areas, which could be used as a model by the rest of the world.

There is a high probability that the project will lead to increased integrity of leopards' habitats, decrease or even reverse the rates of decline in leopard populations and over-all decrease pressure on human-leopard conflict.

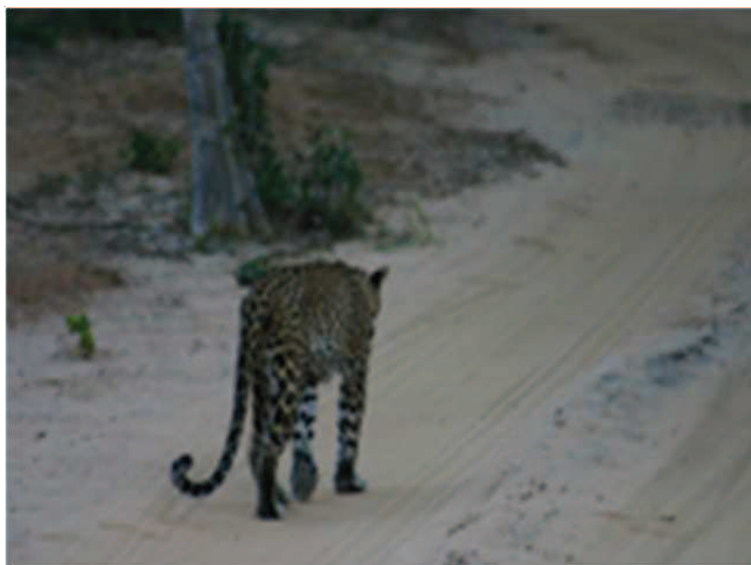
## TIMEFRAME FOR THE PROJECT IMPLEMENTATION

Key Activities	Duration			
	Year I - quarters			
	1st	2nd	3rd	4th
Conduct survey to identify the most appropriate farmer associations				
Conduct a survey to identify the relevant schools for awareness programs				
Conduct a survey to identify the most appropriate local governmental institutions				
Preparation of time table				
Coordination with relevant resource persons to conduct programs				
Signature of agreement on the leopard project: SLWF responsible, farmers, teachers and authorities				
preparation of education modules				
Preparation of information materials				
Preparation of multimedia presentations and look for specialists ready to make presentation (check schedules)				
Conduct awareness programs for schools: 2 sessions (2h programs)				
Conduct awareness programs for farmer groups (2 programs per district/ cow organizations per year)				
Conduct of awareness programs for local Govt. institutions (2 programs)				
Survey on education campaign progress: quiz, diploma, test				
Progress Review/Report				

Table 1. Project 1: Communication Campaign

Key Activities	Duration			
	Year I - quarters			
	1st	2nd	3rd	4th
Conduct survey to identify the most appropriate farmer associations				
Conduct a survey to identify the most appropriate local governmental institutions				
Conduct a survey to identify the outside volunteer possibilities in responsible tourism business				
List of members who are willing to belong to leopard warning network				
Preparation of time table				
Coordination with relevant resource persons to conduct programs: a local supervisor, a scientific (biologist/naturalist), a volunteer camp supervisor				
Signature of agreement on the leopard project: SLWF responsible, farmers, volunteer supervisors and authorities				
Recruit Volunteers and set up logistic to welcome them in Yala				
Start building and/or organizing facilities to welcome volunteers, start marketing and advertising abroad				
Start welcoming chosen guests and volunteers to watch leopards, maintain scientific data base and develop the local economy outside of Yala National Park				
List of leopard observations updated thanks to leopard warning network and clear assessment on leopards' topics in the area				
Survey on project progress: facilities, volunteer supervision.. Feedback sheets				
Monitoring the leopard population by maintaining clear database				
Set up a scientific data base concerning leopards in buffer zone				
Communicate and publish result				
Progress Review/Report				

**Table 2. Project 2: Scientific Campaign and Establishment of warning network for main leopards 'hotspots:**



Key Activities	Duration			
	Year I - quarters			
	1st	2nd	3rd	4th
Conduct survey to identify the most appropriate farmer associations				
Conduct previous study to identify how many kraals and what model will be mode adapted for the villages				
Conduct a survey to identify the outside volunteer possibilities in responsible tourism business to help in building of kraal and watching the kraals once built				
Preparation of time table				
Coordination with relevant resource persons to conduct programs: a local supervisor (1 by cage), a scientific (biologist/naturalist), a volunteer camp supervisor, drivers				
Signature of agreement on the leopard project: SLWF responsible, farmers, volunteer supervisors and authorities				
Start building and/or organizing facilities to welcome responsible tourism, start marketing and advertising abroad				
Start welcoming chosen guests and volunteers to watch leopards and develop the local economy outside of Yala National Park				
Choose a responsible person to monitor the cage				
Establishment of kraals/calve cages: buy material and build it				
Set up volunteer nocturnal patrol to check leopard presence around the cages				
List of leopard observations updated thanks to leopard patrols				
Survey on project progress: cages maintenance, volunteer facilities...				
Monitoring the leopard population and necessity of kraals by maintaining clear database				
Progress Review/Report				

Table 3. Project 3: Establishment of pens/kraals

Key Activities	Duration			
	Year I - quarters			
	1st	2nd	3rd	4th
Conduct survey to identify the most appropriate farmer associations				
Conduct a survey to identify the outside volunteer/responsible tourist possibilities in local tourism business				
Conduct a survey to identify the most appropriate local governmental institutions				
Preparation of time table				
Coordination with relevant resource persons to conduct programs				
Signature of agreement on the leopard project: SLWF responsible, farmers, teachers and authorities				
Selection of farmers and villagers with a willingness to develop ecotourism around leopard-watching in the area				
Training on tourism possibilities and hotel businesses: recruit professional to make presentation...				
Start building and/or organizing facilities to welcome responsible tourism, start marketing and advertising abroad				
Start welcoming chosen guests and volunteers to watch leopards and develop the local economy outside of Yala National Park				
Survey on project progress: education campaign, villagers' necessities, tourism facilities...				
Monitoring the leopard population by maintaining clear database with tourist/volunteer's help				
Communicate about leopards from local/volunteers to tourist				
Progress Review/Report (feedback sheets)				

Table 4. Project 4: Establishment of leopard watching and wildlife tourism, outside the boundaries of

Key Activities	Duration			
	Year I - quarters			
	1st	2nd	3rd	4th
Conduct survey to identify the most appropriate farmer associations				
Conduct a survey to identify the most appropriate local and national governmental institutions as responsible				
Conduct a survey to identify the relevant target for petitions: international community, local public, relevant local celebrities				
Preparation of time table				
Coordination with relevant resource persons to conduct programs: welcome volunteer to organize petitions campaign, organize help writing relevant document for authorities				
Signature of agreement on the leopard project SLWF responsible, farmers and authorities about necessity to set up a financial help for farmers				
Start building and/or organizing facilities to welcome responsible tourism, start marketing and advertising abroad				
Start welcoming chosen guests and volunteers to maintain a clear database on leopards attacks				
List of leopard observations updated and clear assessment on leopards' attacks/damage				
Write clear possible compensation chart with authorities' help				
Set up and collect petitions to pressure government decisions makers				
Submit Compensation chart process and petitions to national authorities				
Survey on project progress: compensation chart, volunteer facilities, number of attacks...				
Progress Review/Report				

*Table 5. Project 5: Establishment of financial compensatory help from government*

